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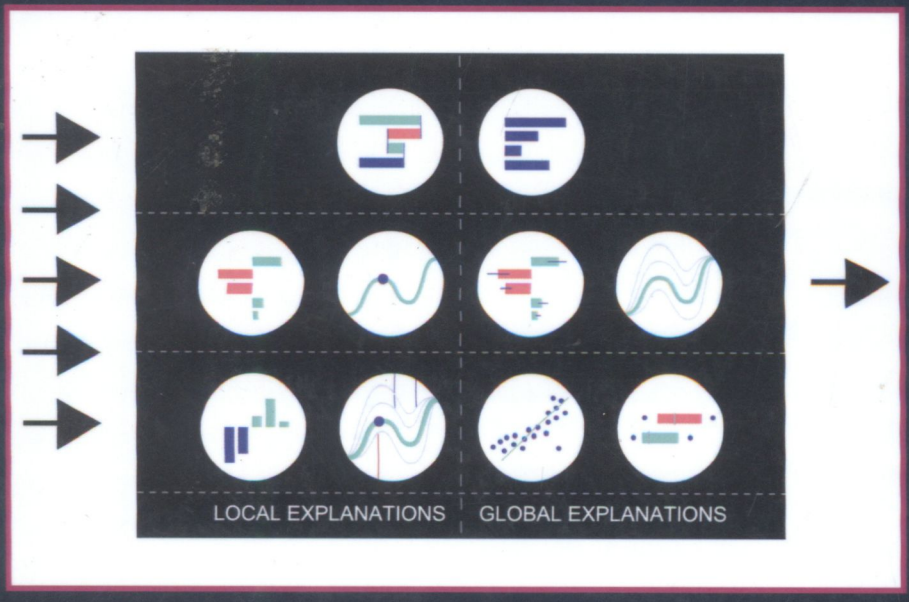
EXPLANATORY MODEL ANALYSIS

Explore, Explain, and Examine Predictive Models



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Explanatory Model Analysis

Explore, Explain and Examine Predictive Models

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EXPLANATORY MODEL ANALYSIS

Explore, Explain, and Examine Predictive Models

Explanatory Model Analysis Explore, Explain, and Examine Predictive Models is a set of methods and tools designed to build better predictive models and to monitor their behavior in a changing environment. Today, the true bottleneck in predictive modelling is neither the lack of data, nor the lack of computational power, nor inadequate algorithms, nor the lack of flexible models. It is the lack of tools for *model exploration* (extraction of relationships learned by the model), *model explanation* (understanding the key factors influencing model decisions) and *model examination* (identification of model weaknesses and evaluation of model's performance). This book presents a collection of model agnostic methods that may be used for any black-box model together with real-world applications to classification and regression problems.

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